



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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Ref: 8WP-CWQ

FEB 21 2017

Karl Rockeman, Director
Division of Water Quality
North Dakota Department of Health
918 East Divide Avenue, 4th Floor
Bismarck, North Dakota 58501-1947

Re: Clean Water Act Section 303(d) Total Maximum Daily Load (TMDL) Waterbody List


Dear Mr. Rockeman:

Thank you for your submittal of the North Dakota Department of Health (NDDoH) 2016 Water Quality Integrated Report received January 23, 2017. The Environmental Protection Agency Region 8 has conducted a complete review of the Clean Water Act Section 303(d) waterbody list (Section 303(d) list) and supporting documentation and information. The EPA has determined that North Dakota's 2016 Section 303(d) list meets the requirements of Section 303(d) of the Clean Water Act (CWA) and the EPA's implementing regulations found at 40 C.F.R. Part 130 and approves North Dakota's 2016 Section 303(d) list.

The EPA's approval of North Dakota's 2016 Section 303(d) list extends to waterbodies on the list with the exception of those waters that are within Indian country, as defined at 18 U.S.C. § 1151. The EPA is taking no action with respect to the Indian country area at this time. EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities for Indian country lands.

The attachment describes the statutory and regulatory requirements of the CWA Section 303(d) list and a summary of the EPA's review of North Dakota's compliance with each requirement. The EPA appreciates your work to produce North Dakota's 2016 Section 303(d) list. If you have questions, the most knowledgeable EPA staff person is Kris Jensen and she may be reached at (303) 312-6237.

Sincerely,


for Darcy O'Connor
Assistant Regional Administrator
Office of Water Protection

Attachment

cc: Mike Ell, NDDoH
Kris Jensen, EPA, 8WP-CWQ

Review of North Dakota's 2016 Section 303(d) Waterbody List

*Attachment to letter from, Darcy O'Connor, Assistant Regional Administrator,
Office of Water Protection, US EPA, Region VIII to Karl Rockeman, Director,
Division of Water Quality, North Dakota Department of Health*

Date of Transmittal Letter from State: January 23, 2017
Date of Receipt by EPA: January 23, 2017

I. Introduction

North Dakota Department of Health (NDDoH) submitted their final 2016 Integrated Report (IR) to the Environmental Protection Agency (EPA) on January 23, 2017. Based on our review of the State's CWA Section 303(d) water body list ("Section 303(d) list"), EPA is approving North Dakota's 2016 list. The purpose of this review document is to describe the rationale for EPA's approval. The EPA's approval of North Dakota's 2016 Section 303(d) list extends to waterbodies on the list with the exception of those waters that are within Indian country, as defined at 18 U.S.C. § 1151. The EPA is taking no action with respect to the Indian country area at this time. EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities for Indian country lands.

In March 2011, EPA issued guidance for integrating the development and submission of 2012 Section 305(b) water quality reports and Section 303(d) lists of impaired waters. This guidance, and previous EPA guidance, recommends that states develop an Integrated Report of the quality of their waters by placing all waters into one of five assessment categories. By following this guidance, Category 5 of the Integrated Report is the State's Section 303(d) list. EPA's action in review and approval of this document is only on Category 5 that comprises the Section 303(d) list within the Integrated Report.

EPA reviewed the methodology used by the State in developing the Section 303(d) list and the State's description of the data and information it considered. EPA's review of North Dakota's 2016 Section 303(d) list is based on EPA's analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

North Dakota's 2016 list is considered an update of the State's 2014 list, and as such, the Section 303(d) list EPA is approving today is comprised of 225 assessment units (355 waterbody/pollutant combinations), compared with 216 assessment units included on the 2014 list. States may add and take waters off their Section 303(d) lists based on several factors. For the 2016 cycle, North Dakota removed 14 waterbody/pollutant combinations from its year 2014 list.

II. Statutory and Regulatory Background

A. Identification of Water Quality Limited Segments (WQLSs) for Inclusion on Section 303(d) List

Section 303(d)(1) of the CWA directs states to identify those waters within its jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standard, and to establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters. The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d).

EPA regulations implementing Section 303(d) require states to identify water quality limited segments (WQLSs) that need TMDLs. 40 C.F.R. § 130.7(b). WQLSs¹ are defined in regulation as segments "where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after the application of the technology-based effluent limitations required by sections 301(b) and 306 of the Act." 40 C.F.R. § 130.2(j). Thus, states do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the CWA; (2) more stringent effluent limitations required by state or local authority; and (3) other pollution control requirements required by state, local, or federal authority. (40 C.F.R. §130.7(b)(1).)

B. Consideration of Existing and Readily Available Water Quality- Related Data and Information

In developing Section 303(d) lists, states are required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as not meeting designated uses, or as threatened, in the State's most recent CWA Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA. (40 C.F.R. §130.7(b)(5)). In addition to these minimum categories, states are required to consider any other data and information that is existing and readily available. EPA's 1991 Guidance for Water Quality-Based Decisions describes categories of water quality-related data and information that may be existing and readily available. (See Guidance for Water Quality-Based Decisions: The TMDL Process, EPA Office of Water, April 1991.) While states are required to evaluate all existing and readily available water quality-related data and information, states may decide to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring states to assemble and evaluate all existing and readily available water quality-related data and information, EPA regulations at 40 C.F.R. §130.7(b)(6) require States to include, as part of their submissions to EPA, documentation to support decisions using or excluding particular data and information and decisions to list or not list waters. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; (3) a rationale for any decision not to use any existing and readily available data and information 40 C.F.R. §130.7(b)(5), and (4) any other reasonable information requested by the Region.

¹ WQLSs may also be referred to as "impaired waterbodies" or "impairments" throughout this document.

C. Priority Ranking

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the CWA that states establish a priority ranking for listed waters. The regulations at 40 C.F.R. §130.7(b)(4) require states to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those WQLSs targeted for TMDL development in the next two years. In prioritizing and targeting waters, states must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. (CWA Section 303(d)(1)(A). As long as these factors are taken into account, the CWA provides that states establish priorities. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs such as wasteload allocations for permits, vulnerability of particular waters as aquatic habitats, recreational, economic, and aesthetic importance of particular waters, degree of public interest and support, and state or national policies and priorities. (See 57 Fed. Reg. 33040, 33045 (July 24, 1992), and EPA's 1991 Guidance).

D. Applicable Water Quality Standards

For purposes of identifying waters for the Section 303(d) list, the terms “water quality standard applicable to such waters” and “applicable water quality standards” refer to those water quality standards established under Section 303 of the Act. On April 27, 2000, EPA promulgated a rule under which the “applicable standard” for Clean Water Act purposes depends on when the relevant States or authorized Tribes promulgated that standard. Standards that States or authorized Tribes have promulgated before May 30, 2000 are effective upon promulgation by the States or authorized Tribes. Standards that States or authorized Tribes promulgated on or after May 30, 2000 become effective only upon EPA approval. 40 C.F.R. §131.21(c). EPA interprets CWA Section 303(d) to require EPA establishment or approval of section 303(d) lists only for impairments of waters with Federally-approved water quality standards.

III. Analysis of North Dakota's Submission

A. Background

In reviewing North Dakota's submittal, EPA first reviewed the methodology used by the State to develop their 2016 Section 303(d) list in light of North Dakota's approved water quality standards, and then reviewed the actual list of waters. The State's Assessment Methodology comprises Appendix C of the Integrated Report. EPA has reviewed the State's submission, and has concluded that the State developed its Section 303(d) list in compliance with Section 303(d) of the CWA and 40 C.F.R. §130.7. EPA's review is based on its analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed. North Dakota considered all data and information pertaining to the categories under 40 C.F.R. §130.7(b)(5), and properly listed WQLSs under 40 C.F.R. §130.7(b)(1).

In previous guidance, EPA recommended that states develop an Integrated Report of the quality of their waters by placing all waters into one of five assessment categories. (See EPA's Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, July 21, 2005.) By following this guidance, Category 5 of the Integrated Report is the State's Section 303(d) list. EPA's action in review and approval of this document is only on Category 5 that comprises the Section 303(d) list within the Integrated Report.

The State's list was submitted to EPA Region 8 with email correspondence dated January 23, 2017 from Mike Ell, Manager, Watershed Protection Program, NDDoH in a document entitled "*North Dakota 2016 Integrated Section 305(b) Water Quality Assessment Report and Section 303(d) List of Waters Needing Total Maximum Daily Loads*".

The year 2016 Integrated Report submitted to the EPA from the North Dakota Department of Health consisted of the following portions that are necessary for the Section 303(d) waterbody list:

- **Waterbodies and corresponding pollutants that make up the State's Section 303(d) list** (See Tables VI-1 through 4, pages VI-6 to VI-45: 2016 List of Section 303(d) TMDL Waters for the Souris, Red River, Lake Sakakawea/Missouri, Lake Oahe/Missouri and James River Basins in North Dakota).
- **Prioritization of waterbodies for TMDL development** (See page I-7 and Tables VI-1 through 4, pages VI-6 to VI-45: 2016 List of Section 303(d) TMDL Waters for the Souris, Red River, Lake Sakakawea/Missouri, Lake Oahe/Missouri and James River Basins in North Dakota).
- **Identification of waters targeted for TMDL development over the next biennium** (See page I-7 and Tables VI-1 through 4, pages VI-6 to VI-45: 2016 List of Section 303(d) TMDL Waters for the Souris, Red River, Lake Sakakawea/Missouri, Lake Oahe/Missouri and James River Basins in North Dakota).

EPA's approval action of North Dakota's year 2016 Section 303(d) list extends only to the items listed immediately above.

The 2016 Section 303(d) waters are found in the State's Integrated Report, Tables VI-1 through 4, pages VI-6 to VI-45). The tables contain the following information for each waterbody: Assessment Unit (AU) ID, AU Description, AU Size, Designated Use, Use Support, Impairment, and TMDL Priority.

B. Identification of Waters and Consideration of Existing and Readily Available Water Quality-Related Data and Information

EPA has reviewed North Dakota's description of the data and information it considered for identifying waters on the Section 303(d) list. EPA concludes that the State properly assembled and evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 C.F.R. §130.7(b)(5) and properly identified and listed WQLSs as required by 40 C.F.R. §130.7(b)(1). In particular, the State relied on information from the 2016 Section 305(b) water quality assessments, assessments performed under the CWA Section 319 non-point source program, as well as data and information obtained through an extensive process to solicit information from state, federal and citizen sources. The State's evaluation of data and information in each of these categories is described below.

- *Waters identified by the state in its most recent section 305(b) report as "partially meeting" or "not meeting" designated uses or as "threatened"* (40 C.F.R. §130.7(b)(5)(i)): North Dakota produced a 2016 Integrated Report consistent with EPA's guidance regarding combined CWA 305(b) reports and 303(d) lists. EPA concludes that North Dakota made listing decisions using all existing and readily available data and information, in development of its 2016 Section 303(d) waterbody list.

- *Waters for which dilution calculations or predictive models indicate non-attainment of applicable water quality standards* (40 C.F.R. §130.7(b)(5)(ii)): North Dakota assembled and evaluated information from past and anticipated dilution calculations and predictive modeling. EPA concludes that North Dakota properly considered waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards in development of its 2016 Section 303(d) waterbody list.

- *Waters for which water quality problems have been reported by local, state, or federal agencies; members of the public; or academic institutions* (40 C.F.R. §130.7(b)(5)(iii)): The State solicited data and information in preparation for the 2016 Section 303(d) list. Data and information obtained as a result of this effort were evaluated and considered. The State's submittal identified several entities that contributed data or information and responded to public comments related to assessments for individual waterbodies.

- *Waters identified by the State as impaired or threatened in a nonpoint assessment submitted to EPA under Section 319 of the CWA or in any updates of the assessment* (40 C.F.R. §130.7(b)(5)(iv)): The State's 2016 Section 303(d) list includes all waters that have data to support nonpoint source pollution impairment. North Dakota's listing approach and methodologies direct CWA Section 319 activities and resources to the highest priorities. Watershed assessments are often conducted for waterbodies that are already listed in order to collect current data to support TMDL development.

Based upon its review, EPA concludes that, with regard to the waters identified in the State's 2016 Section 303(d) list, the State's process for developing that list substantially meets the requirements of 40 C.F.R. §130.7(b)(i-iv) regarding the consideration of all existing and readily available water quality-related data and information, as well as the requirements of 40 C.F.R. Part 130.7(b)(1).

C. Waters Removed from the Section 303(d) List

In addition to adding WQLSs that require TMDLs to its 303(d) list, a state may also remove waters from its list when such removal is justified. EPA has identified four reasons that justify the removal of a water from a state's 303(d) list. These are:

1. The state has prepared and EPA has approved a TMDL for the listed water.
2. The original basis for listing the water was incorrect.
3. New data or information indicates that the applicable water quality standard for the water is being met and its designated uses are fully supported.
4. The state has adopted and EPA has approved a site-specific water quality standard for the water, and the new water quality standard is being met.

A full accounting of waters removed from the State's 2014 303(d) list is provided on page II-2 and in Table VI-5. 2014 Section 303(d) TMDL Waters in the State Which Have Been De-listed for 2016 beginning on page VI-47 of the Integrated Report. The states removal decisions and stated justifications are summarized below:

Number of Waterbody-Pollutant Combinations Removed from List	
Reason	2016

TMDL completed and approved by EPA	9
Original basis for listing was incorrect	0
New data or information indicate applicable WQS is being met	6
Total	15

In reviewing the State's 2016 Section 303(d) waterbody list, EPA carefully considered North Dakota's decision to remove certain waterbody-pollutant combinations from the State's 2014 303(d) list, its justification for those removals, and the methodology it used in making those decisions. EPA concludes that the removal decisions identified in the Integrated Report are based on all existing and readily available water quality-related data and information, and that the removal decisions are properly justified.

D. Priority Ranking and Schedule for Development of TMDLS for Listed Waters and Pollutants

Pursuant to the listing methodology set out in the State's submittal, North Dakota prioritized WQLSs for TMDL development into a two-phased approach for prioritizing impaired waters for TMDL development and watershed planning. Specifically, the TMDL prioritization strategy will be used to identify 1) a list of priority waters targeted for TMDL development or alternative approaches in the next two years (near term); and 2) a list of priority waters scheduled for likely TMDL development or alternative approaches through 2022 (long term). For purposes of TMDL listing, both near term (next two years) and long term (through 2022) TMDL waterbodies are considered "high" priority for TMDL development or alternative restoration approaches.

Prioritization completed under Phase 1 was a review of the Section 303(d) list of impaired waters needing TMDLs included in the 2014 Integrated Report. The purpose of the review was twofold. One, to identify as low priority, waterbodies and/or waterbody-pollutant combinations listings which had insufficient data for immediate TMDL development, where there was uncertainty regarding the basis for the impairment listing, or where the TMDL was beyond the technical and financial ability of the WMP; and two, to identify as high priority (near term and long term), impaired waterbodies and/or waterbody/pollutant combinations where there are currently sufficient data available for TMDL development, where there is strong local support for a TMDL development project, and/or where the WMP has the technical resources and capability to develop the TMDL.

While Phase 1 of the TMDL prioritization process focused on the near term creation of TMDLs and alternative plans, Phase 2 will look at addressing longer term goals and identifying data gaps and information needs through an inclusive stakeholder driven process whereby priorities will be identified in each of the state's five major river basins. This approach is called the Basin Water Quality Management Framework.

As the list of impaired waters changes with each biennial Integrated Report, the state TMDL development priorities will likely change during Phase 2. This may result in priority changes. It is also expected that TMDL development priorities will be adjusted as the Watershed Management Program (WMP) implements the Basin Framework. In developing its list of near term and long term TMDL development and watershed planning priorities, the WMP will use the list of impaired waters as

provided in the 2014 Integrated Report (http://www.ndhealth.gov/WQ/SW/Z7_Publications/IntegratedReports/2014_North_Dakota_Integrated_Report_Final_20150428.pdf). North Dakota's TMDL prioritization strategy is fully described in Appendix B of North Dakota's Integrated Report.

EPA reviewed the State's priority ranking of listed waters for TMDL development, and concluded that the State properly took into account the severity of pollution and the uses to be made of such waters, as required by 40 C.F.R. 130.7(b)(4), as well as other relevant factors such as imminent human health problems or local support for water quality improvement. In addition, EPA concluded that the State listed WQLS targeted for TMDL development in the next two years, as required by 40 C.F.R. 130.7(d).

IV. Final Recommendation on North Dakota's 2016 Section 303(d) List Submittal

After careful review of North Dakota's final Section 303(d) list submittal package, EPA has determined that North Dakota's 2016 Section 303(d) list meets the requirements of Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations and approves North Dakota's 2016 Section 303(d) list.

V. References

The following list includes documents that were used directly or indirectly as a basis for EPA's review and approval of the State's Section 303(d) waterbody list. This list is not meant to be an exhaustive list of all records, but to provide the primary documents the Region relied upon in making its decisions to approve the State's list.

40 C.F.R. Part 130 Water Quality Planning and Management

40 C.F.R. Part 131 Water Quality Standards

July 29, 2005, Memorandum from Diane Regas, Director, Office of Wetlands, Oceans, and Watersheds, US EPA to Water Division Directors transmitting EPA's "Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act"

October 12, 2006, Memorandum from Diane Regas, Director, Office of Oceans, Wetlands, and Watersheds entitled *Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*.

May 5, 2009, Memorandum from Suzanne Schwartz, Acting Director, Office of Wetlands, Oceans, and Watersheds, entitled *Information Concerning 2010 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*.

March 21, 2011, Memorandum from Denise Keehner, Director, Office of Wetlands, Oceans, and Watersheds, entitled *Information Concerning 2012 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*.

April 1991, "Guidance for Water Quality-Based Decisions: The TMDL Process," EPA 440/4-91-001.

July 24, 1992 Federal Register Notice, *40 C.F.R. Parts 122, 123, 130, Revision of Regulation*, 57 FR 33040.

August 8, 1997, Memorandum from Robert Perciasepe, Assistant Administrator for Water, US EPA, regarding "New Policies for Establishing and Implementing TMDLs."

September, 1997, Guidance from Office of Water, Headquarters, US EPA regarding "Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates" Supplement, EPA-841-B-97-002B.

November 5, 1997, Memorandum from Tudor Davies, Director, Office of Science and Technology to Water Management Division Directors entitled "Establishing Site Specific Aquatic Life Criteria Equal to Natural Background."

August 23, 1999, Federal Register Notice. *Proposed Revisions to the Water Quality Management and Planning Regulations*, 64 FR 46012.

April 27, 2000, Federal Register Notice, *EPA Review and Approval of State and Tribal Water Quality Standards*, 65 FR 24641

September 3, 2013, US EPA Memorandum, Information Concerning 2014 Clean Water Act 303(d), 305(b) and 314 Integrated Reporting and Listing Decisions

September 3, 2013, US EPA Memorandum, Information Concerning 2014 Clean Water Act 303(d), 305(b) and 314 Integrated Reporting and Listing Decisions

August 13, 2015, US EPA Memorandum, Information Concerning 2016 Clean Water Act Sections 303(d), 305(b) and 314 Integrated Reporting and Listing Decisions

December 21, 2016, email from Kris Jensen, Monitoring and Assessment Program, Water Quality Unit, Water Protection Program, US EPA Region VIII, to Mike Ell, Manager, Watershed Protection Program, Surface Water Quality Program, North Dakota Department of Health.

January 13, 2017, North Dakota Department of Health response regarding EPA's comments on North Dakota's 2016 draft Integrated Report.